

TABLE OF CONTENTS

Executive Summary	ES-1
ES.1 Introduction	ES-1
ES.2 Purpose and Need	ES-2
ES.3 NEPA Compliance	ES-3
ES.4 Public Scoping Process	ES-3
ES.5 Proposed Action and Alternatives	ES-4
ES.5.1 No Action Alternative	ES-4
ES.5.2 Proposed HCP Alternative	ES-4
ES.5.3 Reduced Permit Area Alternative	ES-4
ES.6 Environmental Effects of the Proposed Action and Alternatives	ES-11
1.0 Purpose and Need for Action	1-1
1.1 Background and Proposed Action	1-1
1.2 Purpose and Need for the Proposed Federal Action	1-2
1.3 Assessments and Decisions Required	1-3
1.4 Relevant Statutes, Regulations, and Guidelines	1-4
1.4.1 National Environmental Policy Act (NEPA)	1-4
1.4.2 The Endangered Species Act (ESA)	1-5
1.5 Organization of the EIS	1-7
1.6 Scope of Draft EIS Analysis	1-8
1.7 Public Outreach and Scoping Process	1-9
1.7.1 NEPA Scoping Process	1-9
1.7.2 Notice of Intent	1-9
1.7.3 Public Scoping Meetings	1-10
1.7.4 Issues Raised During the Scoping Process	1-10
1.7.5 Identification of Potentially Significant Issues	1-12
1.7.6 Draft EIS Public Review	1-12
2.0 Proposed Action and Alternatives	2-1
2.1 Introduction	2-1
2.2 Background	2-2
2.2.1 Covered Lands	2-2
2.2.2 Existing Land Use	2-10
2.2.3 Covered Species	2-10
2.3 Alternatives	2-11
2.3.1 Introduction	2-11
2.3.2 No Action Alternative	2-11
2.3.3 Proposed HCP Alternative	2-11
2.3.3.1 Covered Activities	2-12
2.3.4 Reduced Permit Area Alternative	2-48
2.3.5 Alternatives Eliminated From Further Consideration	2-49
3.0 Affected Environment	3-1
3.0.1 Introduction to Affected Environment	3-1
3.0.2 Covered Lands and Study Area	3-2
3.1 Aesthetics/Visual Resources	3.1-1
3.1.1 Concepts and Terminology	3.1-1
3.1.1.1 Visual Character	3.1-1
3.1.1.2 Visual Quality	3.1-2
3.1.1.3 Viewer Exposure and Sensitivity	3.1-2

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

3.1.2	Regulatory Setting	3.1-3
3.1.2.1	Federal	3.1-3
3.1.2.2	State	3.1-3
3.1.2.3	Local	3.1-4
3.1.3	Environmental Setting	3.1-5
3.1.3.1	Regional Setting	3.1-5
3.1.3.2	Local Setting	3.1-6
3.2	Agriculture	3.2-1
3.2.1	Regulatory Setting	3.2-1
3.2.1.1	Federal	3.2-1
3.2.1.2	State	3.2-1
3.2.1.3	Local	3.2-5
3.2.2	Environmental Setting	3.2-8
3.2.2.1	State	3.2-8
3.2.2.2	Kern County	3.2-9
3.2.2.3	Covered Lands	3.2-10
3.3	Air Quality and Greenhouse Gas	3.3-1
3.3.1	Regulatory Setting	3.3-1
3.3.1.1	National Ambient Air Quality Standards	3.3-1
3.3.1.2	State Ambient Air Quality	3.3-2
3.3.1.3	San Joaquin Valley Air Pollution Control District	3.3-2
3.3.1.4	Local	3.3-2
3.3.1.5	Greenhouse Gas Regulatory Framework	3.3-7
3.3.2	Environmental Setting	3.3-9
3.3.2.1	San Joaquin Valley Air Basin Characteristics	3.3-10
3.3.2.2	Pollutants of Concern	3.3-11
3.3.2.3	Toxic Air Contaminants	3.3-15
3.3.2.4	Greenhouse Gases	3.3-19
3.4	Biological Resources	3.4-1
3.4.1	Regulatory Setting	3.4-1
3.4.1.1	Federal	3.4-1
3.4.1.2	State	3.4-4
3.4.1.3	Kern County	3.4-4
3.4.2	Environmental Setting	3.4-5
3.4.2.1	Regional Setting	3.4-5
3.4.2.2	General Site Characteristics	3.4-20
3.4.2.3	Site-Specific Characteristics	3.4-47
3.5	Cultural Resources	3.5-1
3.5.1	Regulatory Setting	3.5-1
3.5.1.1	Federal	3.5-1
3.5.1.2	State	3.5-2
3.5.1.3	Local	3.5-4
3.5.2	Cultural Resources Setting	3.5-5
3.5.2.1	Prehistoric Setting	3.5-5
3.5.2.2	Ethnographic Setting	3.5-7
3.5.2.3	History	3.5-8
3.5.3	Paleontological Setting	3.5-9
3.5.4	Results of the Records Search	3.5-9
3.5.4.1	Records Search	3.5-9
3.5.4.2	Field Surveys	3.5-10
3.6	Geology and Soils	3.6-1
3.6.1	Regulatory Setting	3.6-1
3.6.1.1	Federal	3.6-1
3.6.1.2	State	3.6-2

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

	3.6.1.3	Local.....	3.6-3
3.6.2		Environmental Setting	3.6-4
	3.6.2.1	Geologic Setting.....	3.6-4
	3.6.2.2	Faults and Seismic History	3.6-4
	3.6.2.3	Soils	3.6-5
	3.6.2.4	Seismic Hazards.....	3.6-6
	3.6.2.5	Fault Rupture	3.6-7
	3.6.2.6	Ground Shaking	3.6-7
	3.6.2.7	Ground Failure	3.6-7
	3.6.2.8	Landslides and Slope Failure	3.6-8
3.7		Hazards and Hazardous Materials	3.7-1
	3.7.1	Regulatory Setting	3.7-1
		3.7.1.1 Federal.....	3.7-1
		3.7.1.2 State.....	3.7-2
		3.7.1.3 Local.....	3.7-7
	3.7.2	Environmental Setting	3.7-8
		3.7.2.1 Existing Environment	3.7-8
3.8		Hydrology and Water Quality	3.8-1
	3.8.1	Regulatory Setting	3.8-1
		3.8.1.1 Federal.....	3.8-1
		3.8.1.2 State.....	3.8-1
		3.8.1.3 Local.....	3.8-4
		3.8.1.4 Wheeler Ridge – Maricopa Water Storage District.....	3.8-5
	3.8.2	Environmental Setting	3.8-6
		3.8.2.1 Regional Surface Water Resources	3.8-6
		3.8.2.2 Groundwater Resources	3.8-13
3.9		Land Use and Planning	3.9-1
	3.9.1	Regulatory Setting	3.9-1
		3.9.1.1 Federal.....	3.9-1
		3.9.1.2 State.....	3.9-1
		3.9.1.3 Local.....	3.9-2
	3.9.2	Environmental Setting	3.9-10
		3.9.2.1 Existing Land Uses	3.9-10
3.10		Mineral Resources.....	3.10-1
	3.10.1	Regulatory Setting	3.10-1
		3.10.1.1 Federal.....	3.10-1
		3.10.1.2 State.....	3.10-1
		3.10.1.3 Local.....	3.10-3
	3.10.2	Environmental Setting	3.10-5
		3.10.2.1 Existing Mineral Resources	3.10-5
3.11		Public Services	3.11-1
	3.11.1	Regulatory Setting	3.11-1
		3.11.1.1 State.....	3.11-1
		3.11.1.2 Local.....	3.11-3
	3.11.2	Environmental Setting	3.11-6
		3.11.2.1 Fire Protection.....	3.11-6
		3.11.2.2 Public Protection and Law Enforcement Services.....	3.11-6
		3.11.2.3 Other Public Facilities	3.11-7
3.12		Traffic and Transportation	3.12-1
	3.12.1	Regulatory Setting	3.12-1
		3.12.1.1 State.....	3.12-1
		3.12.1.2 Regional.....	3.12-1
		3.12.1.3 Local.....	3.12-2
	3.12.2	Environmental Setting	3.12-4

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

	3.12.2.1	Regional.....	3.12-5
	3.12.2.2	Local.....	3.12-6
3.13		Environmental Justice	3.13-1
	3.13.1	Regulatory Setting.....	3.13-1
	3.13.1.1	Federal.....	3.13-1
	3.13.1.2	State.....	3.13-2
	3.13.1.3	Local.....	3.13-2
	3.13.2	Socioeconomic Conditions	3.13-5
	3.13.2.1	Population	3.13-5
	3.13.2.2	Demographics.....	3.13-6
4.0		Environmental Consequences	4-1
	4.0.1	Introduction.....	4-1
	4.0.2	Methods of Assessing Direct and Indirect Effects.....	4-1
	4.0.3	Methods for Assessing Cumulative Effects.....	4-2
	4.0.4	Cumulative Effects Analysis Area	4-3
	4.0.5	Determination of Scope of Cumulative Effects.....	4-7
4.1		Aesthetics/Visual Resources	4.1-1
	4.1.1	Overview.....	4.1-1
	4.1.2	Methodology	4.1-1
	4.1.3	No Action Alternative	4.1-2
	4.1.3.1	Solar Areas	4.1-2
	4.1.3.2	Conservation Areas	4.1-3
	4.1.3.3	Mitigation Measures.....	4.1-3
	4.1.3.4	Cumulative Effect.....	4.1-3
	4.1.4	Proposed HCP Alternative	4.1-3
	4.1.4.1	Solar Areas	4.1-3
	4.1.4.2	Conservation Areas	4.1-19
	4.1.4.3	Proposed Mitigation Measures	4.1-19
	4.1.4.4	Cumulative Effect.....	4.1-21
	4.1.5	Reduced Permit Area Alternative	4.1-22
	4.1.5.1	Solar Areas	4.1-22
	4.1.5.2	Conservation Areas	4.1-25
	4.1.5.3	Proposed Mitigation Measures	4.1-26
	4.1.5.4	Cumulative Effect.....	4.1-26
	4.1.6	Comparison of Alternatives	4.1-26
4.2		Agriculture	4.2-1
	4.2.1	Overview.....	4.2-1
	4.2.2	No Action Alternative	4.2-1
	4.2.2.1	Solar Sites.....	4.2-2
	4.2.2.2	Conservation Areas	4.2-2
	4.2.2.3	Mitigation Measures.....	4.2-2
	4.2.2.4	Cumulative Effect.....	4.2-3
	4.2.3	Proposed HCP Alternative	4.2-5
	4.2.3.1	Solar Sites.....	4.2-5
	4.2.3.2	Conservation Areas	4.2-6
	4.2.3.3	Mitigation Measures	4.2-7
	4.2.3.4	Cumulative Effect	4.2-7
	4.2.4	Reduced Permit Area Alternative	4.2-9
	4.2.4.1	Solar Sites.....	4.2-9
	4.2.4.2	Conservation Areas	4.2-10
	4.2.4.3	Mitigation Measures	4.2-11
	4.2.4.4	Cumulative Effect	4.2-11
	4.2.5	Comparison of Alternatives	4.2-12

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

4.3	Air Quality and Greenhouse Gas	4.3-1
4.3.1	Overview.....	4.3-1
4.3.2	Methodology	4.3-1
4.3.3	No Action Alternative	4.3-8
4.3.3.1	Construction and Operation Emissions	4.3-9
4.3.3.2	Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	4.3-9
4.3.3.3	Mitigation Measures.....	4.3-9
4.3.3.4	Cumulative Effect.....	4.3-9
4.3.4	Proposed HCP Alternative	4.3-10
4.3.4.1	Construction and Operation Emissions	4.3-10
4.3.4.2	Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	4.3-11
4.3.4.3	Mitigation Measures.....	4.3-11
4.3.4.4	Cumulative Effect.....	4.3-13
4.3.5	Reduced Permit Area Alternative	4.3-14
4.3.5.1	Construction and Operation Emissions	4.3-14
4.3.5.2	Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	4.3-14
4.3.5.3	Mitigation Measures.....	4.3-15
4.3.5.4	Cumulative Effect.....	4.3-15
4.3.6	Comparison of Alternatives	4.3-15
4.4	Biological Resources	4.4-1
4.4.1	Overview.....	4.4-1
4.4.2	Methodology	4.4-1
4.4.3	No Action Alternative	4.4-1
4.4.3.1	Effects to Wetlands and Waters of the U.S.	4.4-2
4.4.3.2	Effects to Species	4.4-2
4.4.3.3	Mitigation Measures.....	4.4-2
4.4.3.4	Cumulative Effects	4.4-2
4.4.4	Proposed HCP Alternative	4.4-3
4.4.4.1	Effects to Wetlands and Waters of the U.S.	4.4-4
4.4.4.2	Effects to Species	4.4-4
4.4.4.3	Mitigation Measures.....	4.4-13
4.4.4.4	Cumulative Effects	4.4-13
4.4.5	Reduced Permit Area Alternative	4.4-14
4.4.5.1	Effects to Wetlands and Waters of the U.S.	4.4-15
4.4.5.2	Effects to Covered Species.....	4.4-16
4.4.5.3	Mitigation Measures.....	4.4-16
4.4.5.4	Cumulative Effects	4.4-16
4.4.6	Comparison of Alternatives	4.4-16
4.5	Cultural Resources	4.5-1
4.5.1	Overview.....	4.5-1
4.5.2	Methodology	4.5-1
4.5.3	No Action Alternative	4.5-2
4.5.3.1	Solar Sites.....	4.5-3
4.5.3.2	Conservation Areas	4.5-3
4.5.3.3	Mitigation Measures.....	4.5-4
4.5.3.4	Cumulative Effects	4.5-4
4.5.4	Proposed HCP Alternative	4.5-4
4.5.4.1	Solar Sites.....	4.5-5
4.5.4.2	Conservation Areas	4.5-6
4.5.4.3	Mitigation Measures.....	4.5-6
4.5.4.4	Cumulative Effect.....	4.5-7

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

	4.5.5	Reduced Permit Area Alternative	4.5-8
	4.5.5.1	Cultural and Paleontological Resources	4.5-8
	4.5.5.2	Solar Sites.....	4.5-8
	4.5.5.3	Conservation Areas	4.5-8
	4.5.5.4	Mitigation Measures.....	4.5-9
	4.5.5.5	Cumulative Effect.....	4.5-9
	4.5.6	Comparison of Alternatives	4.5-9
4.6		Geology and Soils	4.6-1
	4.6.1	Overview.....	4.6-1
	4.6.2	Methodology	4.6-1
	4.6.3	No Action Alternative	4.6-1
	4.6.3.1	Exposure to Seismic Risks	4.6-1
	4.6.3.2	Exposure to Other Soils and Geology Risks.....	4.6-2
	4.6.3.3	Mitigation Measures.....	4.6-2
	4.6.3.4	Cumulative Effect.....	4.6-2
	4.6.4	Proposed HCP Alternative	4.6-2
	4.6.4.1	Exposure to Seismic Risks	4.6-3
	4.6.4.2	Exposure to Other Soils and Geology Risks.....	4.6-7
	4.6.4.3	Mitigation Measures.....	4.6-7
	4.6.4.4	Cumulative Effect.....	4.6-9
	4.6.5	Reduced Permit Area Alternative	4.6-9
	4.6.5.1	Exposure to Seismic Risks	4.6-10
	4.6.5.2	Exposure to Other Soils and Geology Risks.....	4.6-10
	4.6.5.3	Mitigation Measures.....	4.6-10
	4.6.5.4	Cumulative Effect.....	4.6-11
	4.6.6	Comparison of Alternatives	4.6-11
4.7		Hazards and Hazardous Materials	4.7-1
	4.7.1	Overview.....	4.7-1
	4.7.2	Methodology	4.7-1
	4.7.3	No Action Alternative	4.7-1
	4.7.3.1	Hazardous Materials (Hazardous Substances/Solar Panels/Wells/Agricultural Activities)	4.7-1
	4.7.3.2	Hazards (Ambient Temperature/Electromagnetic Fields/Airports/Fire)	4.7-2
	4.7.3.3	Mitigation Measures.....	4.7-2
	4.7.3.4	Cumulative Effect.....	4.7-2
	4.7.4	Proposed HCP Alternative	4.7-2
	4.7.4.1	Hazardous Materials (Hazardous Substances/Solar Panels/ Wells/Agricultural Activities)	4.7-11
	4.7.4.2	Hazards (Ambient Temperature/Electromagnetic Fields/Airports/Fire)	4.7-11
	4.7.4.3	Mitigation Measures.....	4.7-12
	4.7.4.4	Cumulative Effect.....	4.7-13
	4.7.5	Reduced Permit Area Alternative	4.7-13
	4.7.5.1	Hazardous Materials (Hazardous Substances/Solar Panels/Wells/Agricultural Activities)	4.7-14
	4.7.5.2	Hazards (Ambient Temperature/Electromagnetic Fields/Airports/Fire)	4.7-14
	4.7.5.3	Mitigation Measures.....	4.7-14
	4.3.5.4	Cumulative Effect.....	4.7-14
	4.7.6	Comparison of Alternatives	4.7-14
4.8		Hydrology and Water Quality	4.8-1
	4.8.1	Overview.....	4.8-1
	4.8.2	Methodology	4.8-1

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

4.8.3	No Action Alternative	4.8-1
4.8.3.1	Runoff and Drainage	4.8-1
4.8.3.2	Groundwater Effects	4.8-1
4.8.3.3	Cumulative Effect	4.8-2
4.8.4	Proposed HCP Alternative	4.8-2
4.8.4.1	Runoff and Drainage	4.8-2
4.8.4.2	Groundwater Effects	4.8-5
4.8.4.3	Mitigation Measures	4.8-6
4.8.4.4	Cumulative Effect	4.8-7
4.8.5	Reduced Permit Area Alternative	4.8-7
4.8.5.1	Runoff and Drainage	4.8-8
4.8.5.2	Groundwater Effects	4.8-8
4.8.5.3	Mitigation Measures	4.8-8
4.8.5.4	Cumulative Effect	4.8-8
4.8.6	Comparison of Alternatives	4.8-9
4.9	Land Use and Planning	4.9-1
4.9.1	Overview	4.9-1
4.9.2	No Action Alternative	4.9-1
4.9.2.1	Solar Sites	4.9-2
4.9.2.2	Conservation Areas	4.9-2
4.9.2.3	Mitigation Measures	4.9-2
4.9.2.4	Cumulative Effect	4.9-2
4.9.3	Proposed HCP Alternative	4.9-3
4.9.3.1	Solar Sites	4.9-5
4.9.3.2	Conservation Areas	4.9-5
4.9.3.3	Mitigation Measures	4.9-5
4.9.3.4	Cumulative Effect	4.9-6
4.9.4	Reduced Permit Area Alternative	4.9-7
4.9.4.1	Solar Sites	4.9-9
4.9.4.2	Conservation Areas	4.9-9
4.9.4.3	Mitigation Measures	4.9-10
4.9.4.4	Cumulative Effect	4.9-10
4.9.5	Comparison of Alternatives	4.9-11
4.10	Mineral Resources	4.10-1
4.10.1	Overview	4.10-1
4.10.2	No Action Alternative	4.10-1
4.10.2.1	Solar Areas	4.10-1
4.10.2.2	Conservation Areas	4.10-2
4.10.2.3	Mitigation Measures	4.10-2
4.10.2.4	Cumulative Effect	4.10-2
4.10.3	Proposed HCP Alternative	4.10-3
4.10.3.1	Solar Areas	4.10-4
4.10.3.2	Conservation Areas	4.10-4
4.10.3.3	Mitigation Measures	4.10-4
4.10.3.4	Cumulative Effect	4.10-7
4.10.4	Reduced Permit Area Alternative	4.10-8
4.10.4.1	Solar Areas	4.10-8
4.10.4.2	Conservation Areas	4.10-8
4.10.4.3	Mitigation Measures	4.10-9
4.10.4.4	Cumulative Effect	4.10-9
4.10.5	Comparison of Alternatives	4.10-10
4.11	Public Services	4.11-1
4.11.1	Overview	4.11-1
4.11.2	Methodology	4.11-1

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

4.11.3	No Action Alternative	4.11-1
4.11.3.1	Cumulative Effect.....	4.11-2
4.11.4	Proposed HCP Alternative	4.11-2
4.11.4.1	Fire and Medical Aid Services	4.11-2
4.11.4.2	Sheriff Services.....	4.11-3
4.11.4.3	Mitigation Measures.....	4.11-3
4.11.4.4	Cumulative Effect.....	4.11-4
4.11.5	Reduced Permit Area Alternative	4.11-5
4.11.5.1	Fire and Medical Aid Services; Sheriff Services.....	4.11-5
4.11.5.2	Cumulative Effect.....	4.11-5
4.11.6	Comparison of Alternatives	4.11-6
4.12	Traffic and Transportation	4.12-1
4.12.1	Overview.....	4.12-1
4.12.2	Methodology.....	4.12-1
4.12.3	No Action Alternative	4.12-1
4.12.3.1	Cumulative Effect.....	4.12-2
4.12.4	Proposed HCP Alternative	4.12-2
4.12.4.1	Construction and Decommissioning	4.12-2
4.12.4.2	Mitigation Measures.....	4.12-5
4.12.4.3	Operations	4.12-6
4.12.4.4	Cumulative Effect.....	4.12-7
4.12.5	Reduced Permit Area Alternative	4.12-7
4.12.5.1	Construction and Decommissioning	4.12-7
4.12.5.2	Mitigation Measures.....	4.12-8
4.12.5.3	Operations	4.12-8
4.12.5.4	Cumulative Effect.....	4.12-8
4.12.6	Comparison of Alternatives	4.12-8
4.13	Environmental Justice	4.13-1
4.13.1	Methodology.....	4.13-1
4.13.2	Socioeconomics	4.13-1
4.13.2.1	Job Creation.....	4.13-2
4.13.2.2	Revenue and Other Monetary Benefits	4.13-2
4.13.2.3	Health Benefits.....	4.13-2
4.13.3	No Action Alternative	4.13-3
4.13.4	Proposed HCP Alternative	4.13-3
4.13.5	Reduced Permit Area Alternative	4.13-4
4.13.6	Cumulative Effects.....	4.13-5
4.13.6.1	Socioeconomic Effects and Environmental Justice	4.13-5
5.0	Additional Topics Required by NEPA	5-1
5.1	Substantial Irreversible Changes to the Environment Resulting from the Proposed HCP.....	5-1
5.2	Relationship Between Short-Term Uses of Man’s Environment and the Maintenance and Enhancement of Long-Term Productivity	5-1
5.3	Substantial Adverse Effects that Cannot be Avoided.....	5-2
5.4	Growth-Inducing Effects	5-2
5.5	Environmentally Preferable Alternative	5-3
6.0	List of Agencies and Organizations Consulted.....	6-1
7.0	List of Preparers.....	7-1
7.1	United States Fish and Wildlife Service	7-1
7.2	Quad Knopf, Inc.....	7-1

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

7.3	TKM Consulting, Inc.	7-1
7.4	Jaymie Brauer, Environmental Planning Services	7-1
8.0	References	8-1
8.1	Printed	8-1
8.2	Personal Communications.....	8-7
9.0	Acronyms	9-1

Appendices (*Contained on CD. See pocket on back cover*)

Appendix A	Notice of Intent, Comment Letters, Mailing List
Appendix B	Habitat Conservation Plan (HCP) Maricopa Sun Solar Complex Project, Maricopa Sun, LLC, Kern County, California, Quad Knopf, Inc., June 2013

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

TABLES

Table	Name	Page
ES-1	Species Covered by the Maricopa Sun HCP and ITP	ES-2
ES-2	Occurrences of Covered Activities by Phase.....	ES-5
ES-3	Summary of Impacts and Mitigation Measures.....	ES-11
2.2-1	Species Covered by the Maricopa Sun HCP and ITP	2-10
2.3-1	Occurrences of Covered Activities by Phase.....	2-13
3.2-1	Land Capability Classification	3.2-11
3.3-1	Federal and State Ambient Air Quality Standards	3.3-4
3.3-2	San Joaquin Valley Air Basin Attainment Status	3.3-5
3.3-3	Three Year Summary of Days Exceeding NAAQS and CAAQS Pollutant Standards	3.3-6
3.3-4	Kern County Coccidioidomycosis (Valley Fever) Cases by City	3.3-18
3.3-5	Greenhouse Gases.....	3.3-19
3.3-6	Kern County 2005 Base Year and 2020 Forecasted Year by Sector and Subsector	3.3-22
3.4-1	Monthly Maximum, Minimum, and Mean Temperature and Precipitation (Maricopa climate station: http://www.idcide.com/weather/ca/taft.htm)	3.4-9
3.4-2	Soil Types Present on the Maricopa Sun Solar Project's Covered Lands.....	3.4-11
3.4-3	Wetlands and Other Waters Identified Within and Adjacent to the Maricopa Sun Solar Project's Covered Lands.....	3.4-16
3.4-4	Plant Species Occurring on Solar Sites and Adjacent Lands of the Maricopa Sun Solar Project.....	3.4-23
3.4-5	Plant Species Occurring within Conservation Sites, Movement Corridors, and Adjacent Lands of the Maricopa Sun Solar Project.....	3.4-27
3.4-6	Wildlife Species Occurring on Covered Lands and Lands Adjacent to the Maricopa Sun Solar Project	3.4-29
3.4-7	Sensitive Vegetation Communities and Special Status Plant Species Occurring in the Region of the Maricopa Sun Solar Habitat Conservation Plan Area.....	3.4-31
3.4-8	Special Status Wildlife Species Occurring in the Region of the Maricopa Sun Solar Habitat Conservation Plan Area	3.4-32
3.4-9	List of Species Proposed for Coverage, Maricopa Sun HCP	3.4-41
3.4-10	Existing Maricopa Sun Solar Site Conditions and Presence of Covered Species	3.4-48
3.4-11	Existing Conditions of Maricopa Sun Solar Project's Conservation Sites and Presence of Covered Species	3.4-57
3.5-1	Existing Resources Identified During Survey.....	3.5-10
3.12-1	Peak Hour Trips for Nearby Highways.....	3.12-5
3.13-1	2000-2002 U.S. Census Population Estimates.....	3.13-5
3.13-2	Race and Ethnicity (2010 Census)	3.13-6
3.13-3	Educational Achievement	3.13-7
3.13-4	Income (In 2011 Inflation-adjusted dollars).....	3.13-7
3.13-5	Annual Average Unemployment (not seasonally adjusted).....	3.13-8
4.0-1	Proposed, Pending, and Recently Approved Projects Within a Radius of 6 Miles from The Covered Lands – Kern County, CA.....	4-4
4.1-1	Comparison of Alternatives to the No Action Alternative	4.1-27
4.2-1	Comparison of Alternatives to the No Action Alternative	4.2-12
4.3-1	De Minimus Level Thresholds.....	4.3-2
4.3-2	San Joaquin Valley Air Pollution Control Board Thresholds.....	4.3-3
4.3-3	Comparison of Alternatives to the No Action Alternative	4.3-15
4.4-1	Comparison of Alternatives to the No Action Alternative	4.4-17
4.5-1	Comparison of Alternatives to the No Action Alternative	4.5-10
4.6-1	Comparison of Alternatives to the No Action Alternative	4.6-11

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

4.7-1	Noise Levels from a Pile Driver.....	4.7-8
4.7-2	Comparison of Alternatives to the No Action Alternative.....	4.7-15
4.8-1	Comparison of Alternatives to the No Action Alternative.....	4.8-9
4.9-1	Comparison of Alternatives to the No Action Alternative.....	4.9-11
4.10-1	Comparison of Alternatives to the No Action Alternative.....	4.10-10
4.11-1	Comparison of Alternatives to the No Action Alternative.....	4.11-6
4.12-1	Peak Project-Level Construction Trip Generation.....	4.12-5
4.12-2	Comparison of Alternatives to the No Action Alternative.....	4.12-9
5-1	Overall Summary Comparing Environmental Effects of the Alternatives.....	5-4

MARICOPA SUN SOLAR COMPLEX HABITAT CONSERVATION PLAN
Draft Environmental Impact Statement
Table of Contents

FIGURES

Figure No.	Name	Page
ES-1	Regional Vicinity.....	ES-7
ES-2	Proposed Action Parcels.....	ES-9
2-1	Regional Vicinity.....	2-5
2-2	Proposed Action Parcels.....	2-7
2-3	Transmission Routes	2-21
2-4	Barrier Fencing.....	2-43
3.4-1	Location of Regional Context and Protected Public Lands in the Vicinity Map	3.4-7
3.4-2	Soils Map	3.4-13
3.4-3	Flood Zone Map	3.4-17
3.4-4	Wetlands and Waters of the United States	3.4-21
3.4-5	Land Use Map.....	3.4-25
3.4-6A	CNDDDB Sensitive Avian Species Observations	3.4-33
3.4-6B	CNDDDB Sensitive Mammal Species Observations.....	3.4-35
3.4-6C	CNDDDB Sensitive Plant Species Observations	3.4-37
3.4-6D	CNDDDB Sensitive Reptile, Amphibian, Insect, and Invertebrate Species Observations ..	3.4-39
3.4-7	Special Status Species Survey Results	3.4-49
3.8-1	Watersheds	3.8-9
3.8-2	Surface Water Availability and Groundwater Quality Boundary	3.8-11
3.9-1	General Plan Land Use Designations.....	3.9-3
4.1-1	Site and Vicinity Conditions, Looking South toward Existing High-Tension Transmission Line from 170 th Street West and Avenue A	4.1-5
4.1-2	Site and Vicinity Conditions with Views of Active Farmland and Mountain Background from Holiday Avenue and 120 th Street West	4.1-7
4.1-3	Site and Vicinity Conditions, Looking East from 120 th Street West at Undeveloped Lands.....	4.1-9
4.1-4	View of the Covered Lands from the Wind Wolves Preserve Crossing Picnic Area	4.1-15
4.1-5	View of the Covered Lands with Computer Generated Solar Panel Facility from the Wind Wolves Preserve Crossing Picnic Area.....	4.1-17
4.6-1	Regional and Local Faults	4.6-5
4.7-1	Fire Hazard Severity Zones	4.7-9
4.12-1	Workers and Materials Routes.....	4.12-3